
Notes on *Elaeagia myriantha*, Comb. Nov. (Rubiaceae)

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ABSTRACT. Observations of recent fruiting collections of *Simira myriantha* (Standley) Steyermark, a tree found in wet mid-elevation forests from southern Costa Rica to Peru, support the following transfer of this species to *Elaeagia*.

Sickingia myriantha Standley was originally described from flowering material from northern Colombia, but Standley himself later erected the monotypic genus *Holtonia* to accommodate this species, as *Holtonia myriantha* (Standley) Standley. Even though classification within the Rubiaceae has been strongly dependent on knowledge of mature fruits, which were lacking for this taxon, Standley (1938) placed *Holtonia* in the Rondeletieae along with *Sickingia* Willdenow.

Steyermark (1972) determined that *Sickingia* is a synonym of *Simira* Aublet and published new combinations in *Simira* for all *Sickingia* species, including *Sickingia myriantha*. In that work he considered the placement of this species in *Elaeagia*, but rejected this conclusion based on its corolla aestivation. He stated only that the aestivation differed, but did not describe its condition. Steyermark (1974) later presented a detailed description of this species, although the mature fruits were still unknown and his description of them was sketchy.

Recent botanical exploration, particularly in Colombia, has made more material of this species available, including mature fruiting specimens. The fruits are small (2–3 mm long), loculicidal woody capsules that dehisce only partially, apparently allowing a “salt-shaker” dispersal of the numerous small angled seeds. The fruits and seeds are decidedly not those of *Simira*, which has larger (> 1 cm diam.), completely dehiscent capsules with broad, flat, samaralike seeds. Rather, they are characteristic of *Elaeagia* Weddell and *Warszewiczia* Klotzsch, sympatric genera of neotropical trees. These genera are distinguished in part by their corolla aestivation, convolute in *Elaeagia* and imbricate in *Warszewiczia*. Aestivation of the species in question is nearly valvate to slightly convolute, more like that of *Elaeagia*, rather than imbricate as originally implied by Standley when he described this species in *Sickingia*. “*Holtonia*” also shares with *Elaeagia* species rounded to truncate stipules (vs. acute in *Warszew-*

iczia), resinous terminal buds (vs. nonresinous in *Warszewiczia*), glomerulate cymes arranged in pyramidal paniculate inflorescences, and white, short tubular-funnelform corollas with exerted stamens that are barbate near their insertion (similar in *Warszewiczia*). Thus, because of its fruits “*Holtonia myriantha*” is not a *Simira* but rather an *Elaeagia*, and a slight variation in corolla aestivation does not warrant maintaining *Holtonia* as a separate genus.

We present below an expanded morphological description and geographic range for this species, and a selected list of specimens, in addition to types, on which these are based. Representative specimens from Venezuela were cited by Steyermark (1974). This species is distinguished within *Elaeagia* by its persistent, relatively short rounded to truncate stipules. It appears to be most closely related to *E. cubensis* Britton, which shares membranaceous, relatively short stipules that persist on several distal nodes. However, the stipules of *E. cubensis* are ultimately completely deciduous and shorter, and the corolla is campanulate.

***Elaeagia* Weddell, Hist. Nat. Quinquinas 24. 1849.**
TYPE: *Elaeagia utilis* Weddell.

Holtonia Standley, Trop. Woods 30: 37. 1932, syn. nov.
TYPE: *Holtonia myriantha* (Standley) Standley, based on *Sickingia myriantha* Standley.

***Elaeagia myriantha* (Standley) C. M. Taylor & Hammel, comb. nov.** Basionym: *Sickingia myriantha* Standley, Publ. Field Columbian Mus., Bot. Ser. 7(1): 27. 1930. *Holtonia myriantha* (Standley) Standley, Trop. Woods 30: 37. 1932. *Simira myriantha* (Standley) Steyermark, Mem. New York Bot. Gard. 23: 306. 1972. TYPE: Colombia. Magdalena: Las Nubes road, region of Santa Marta, 1,200 m, 3 Dec. 1898, H. H. Smith 1810 (holotype, F; isotypes, MO, NY not seen, US not seen).

Deppea panamensis Dwyer, Ann. Missouri Bot. Gard. 67: 145. 1980, syn. nov. TYPE: Panama. Panamá: 5–10 km NE of Altos de Pacora, Mori & Kallunki 4965 (holotype, MO).

Trees to 20 m tall, buds resinous; bark gray, rough; stems pilosulous to glabrescent. Leaves op-

posite, elliptic, 8–22 cm long, 2.5–10 cm wide, acute at base, acute to shortly acuminate at apex, chartaceous to stiffly so, glabrous above, below glabrous to puberulent or pilosulous, frequently barbate with tufted domatia in vein axils; secondary veins 8–12 pairs; petioles 7–25 mm long; stipules persistent, inter- and intrapetiolar, resinous when young, glabrous to pilosulous, 2–5 mm long, subtruncate to lobed for ca. $\frac{1}{3}$ of their length, not splitting to base, lobes rounded to obtuse. Inflorescences terminal, paniculate, pyramidal, peduncles 0 (and inflorescences tripartite) to 1–7 cm long, panicles 6–11 cm long, 7–14 cm wide, bracts triangular, those subtending branches 1–3 mm long and those subtending flowers ca. 0.5 mm long, branches and bracts glabrous to pilosulous; flowers sessile or with pedicels to 1 mm long in glomerules of 2–8, homostylous, proterogynous; ovary turbinate, 1–1.5 mm long; calyx limb ca. 0.5 mm long, dentate for ca. $\frac{1}{2}$ of its length, lobes 5, acute to obtuse; corolla shortly tubular-funnelform, white to creamy yellow, glabrous externally, internally densely white-villous, tube 3.5–4 mm long, lobes 5, ca. 0.5 mm long, acute to obtuse, aestivation valvate to slightly convolute; stamens 5, inserted near apex of corolla tube, the anthers ca. 1.5 mm long, exerted by ca. 1 mm; stigmas 2, 1–1.5 mm long, linear, recurved, shortly exerted. Fruit capsular, ellipsoid to turbinate, woody, 2–3 mm long, 1.5–2.5 mm wide, loculicidal, basipetally dehiscent, opening for ca. $\frac{1}{2}$ of its length; seeds angled, pale brown, 0.2–0.5 mm diam.

Distribution and habitat. Wet forests at (400–)1,600–2,200(–2,350) m, southern Costa Rica to Andean Venezuela and northern Peru, most frequently collected in northern and central Colombia.

Phenology. Collected in flower January, March, April, and September to November, in fruit March, April, June, July, and October to December.

Representative specimens studied. COLOMBIA. **Antioquia:** autopista Medellín–Bogotá, sector río Samaná–río Claro, San Luis, *Hernández et al.* 522 (COL). **Cauca:** Popayán, Timbío en Hatoviejo, *Pérez & Cuatrecasas* 6107 (COL). **Magdalena:** Campano, Sierra Nevada de Santa Marta, Minca, 11°08'N, 74°01'W, *Gentry & Cuadros* 64762 (MO). **Quindío:** municipio Salento, vereda río Arriba, Hacienda El Cairo, *Arbelaes et al.* 2563 (COL, HUQ). **Valle:** hoya del río Cali, río Pichindé, en Los Cárpatos, *Cuatrecasas* 21625 (CUVC, VALLE). COSTA RICA. **Puntarenas:** Reserva Biológica Carara, sitio Bijagual, *Zúñiga* 407 (CR). **San José:** Zona Protectora Cerro Turrubares, *Hammel et al.* 18967 (CR); El General, *Skutch* 2387 (MO). ECUADOR. **Napo:** carretera Hollín–Loreto, Km 40–50, *Hurtado* 777 (MO). **Pastaza:** Hacienda San Antonio de Baron von Humboldt, 2 km al norte de Mera, 1°27'S, 78°06'W, *Neill et al.* 6069 (MO). PERU. **Cusco:** Paucartambo, Atalaya a Chontachaca, alrededor de la carretera en la ruta hacia Shintuya, *Núñez* 8074 (MO).

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